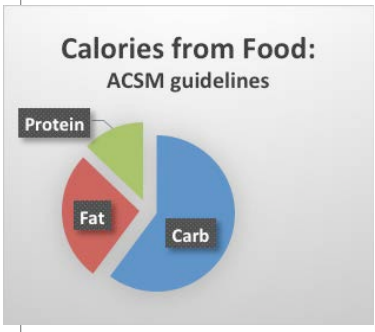
www.dancernutrition.com Emily C. Harrison MS, RD, LD emily@dancernutrition.com



Protein Needs of Dancers

Get the right amount but not not too much

Plant based protein sources provide plenty of amino acids but also provide recovery boosting phytonutrients and antioxidants

Dancers have slightly higher protein needs than the average non-athletic person, particularly if they are still growing adolescents. However, it is important that we think beyond this incorrect idea that most of our food should be protein and that we should avoid carbohydrates. Adequate protein is important, but we want to get the right amount to meet the body's needs, not excess. Everyone is a little different, but guidelines from the American College of Sports Medicine (ACSM) are that 12-15% of all total daily calories should have protein which are strings of amino acids joined together like a train with many cars. These long proteins (trains) get broken down into smaller parts during cooking and digestion so that all the little amino acids (train cars) can then be rejoined together in any combination to meet needs. Protein containing foods like beans, seeds, nuts, soy, quinoa, whole grains and animal meats contain different combinations of these amino acids, but you don't have to worry about getting the right combinations of amino acids, there is always a pool of available amino acids that you add to when eating food. The body is smart.

You certainly don't have to eat animal meat to get enough protein, in fact diets high in animal proteins are associated with higher risk of heart disease and some cancers. Getting adequate protein from plant- based sources has been shown to lower disease risk and easily provides all the amino acids athletes need. The World Health Organization classifies bacon and processed red meats as cancer causing agents (*). You do need protein, but the sources you choose makes a big difference in your long term health, risk for disease, and can even make a big difference in climate change. Eat more plants!

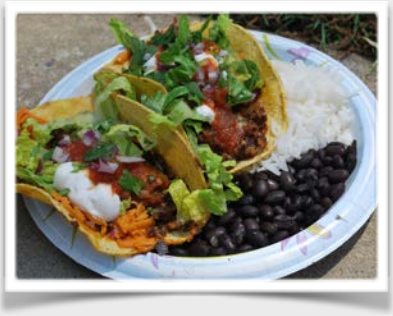
Excess protein...what's the problem with eating too much?

- Excess protein (above the body's needs) is still excess calories, excess protein doesn't magically create muscle.
- The body prefers use carbs as fuel and protein for other things. like muscle building, making hormones, enzymes, fluid balance, etc.
- Excess protein = excess nitrogen. Potentially hard on the kidneys, can increase water excreted, increasing risk for dehydration.
- High protein diets can potentially lead to calcium loss from bone.
- Excess animal meat has been shown to increase risk for heart disease, diabetes, and certain cancers, but a well designed diet rich in plant based proteins reduces risk for these and meets protein needs.

Healthy Protein Sources

1/4 C nuts 8-10g
2 Tbs Chia or Hemp Seeds 5-6g
1/2 C Black Beans 8g
1/2 C Lentils 9g
1/2 C Chickpeas 7g
1/2 cup black-eyed peas 6g
4 slices tempeh 8g
5 medium cubes of tofu 8 g
1/2 C rolled oats 6g
1 C quinoa 8g
1 C brown rice 7g

- 1 cup black eyed peas, walnuts and couscous 11g
- 2 tacos with beans, rice and sweet potatoes: 15g



"Obviously we need protein, my concern is more with the fact that we no longer talk about food as food. Rather we are obsessed with breaking down food to it's component parts and, in so doing, have developed an unhealthy obsession over one particular macronutrient."

-Dr. Garth Davis MD, leading expert on body weight and author of *Proteinaholic*

Don't go overboard on protein! **Plants Have Protein Too!** ***See Resource List for References**